



Issue 34
April 2009

ADVOCATE

Changes Proposed to the Federal Facility Agreement

The Federal Facility Agreement (FFA), the document that guides the process for cleaning up the Oak Ridge Reservation (ORR), is undergoing a major modification. In February the DOE Oak Ridge Environmental Management (EM) Program held a public meeting on the modification to explain what the changes are.

The revisions are the result of approval from DOE head-

quarters to baseline the proposed Integrated Facility Disposition Program (IFDP) and the resolution of disputed FFA milestones and out-year planning among DOE Oak Ridge, the Environmental Protection Agency (EPA), and the Tennessee Department of Environment and Conservation (TDEC), the signatories of the FFA.

Those two events resulted in the inclusion in the FFA of more than 200 additional facilities to be eliminated at the Oak Ridge National Laboratory (ORNL) and the Y-12 National Security Complex. Those 222 facilities are added to the existing 217 facilities that the EM program already is responsible for removing. A change of that magnitude requires that the public be informed of the changes and allowed the opportunity to comment on them.

The public meeting, held February 12 at the DOE Information Center, was hosted by DOE and the Oak Ridge Site Specific Advisory Board (ORSSAB). Dave Adler, the DOE Project Manager for the FFA, explained in more detail what the modification entails.

"We will essentially be doubling the amount

of buildings that we'll be responsible for demolishing on the Oak Ridge Reservation," he said. "This allows for a more thorough cleanup because we'll be able to get at

contaminated soil and groundwater under the buildings." Inclusion of the additional work into the FFA is one aspect of this modification; extending the projected completion date for cleanup of

the ORR from about 2020 to as far out as 2039 is the other.

Adler noted several advantages for including the additional work:

- The IFDP eliminates high-risk legacy wastes associated with the Manhattan Project and the Cold War;
- It will complete the environmental cleanup mission on the ORR;
- It will enable ongoing modernization of ORNL and Y-12.

The changes to the FFA will be to some of the appendices. Appendix C is the list of all the areas on the ORR that will be investigated and/or remediated. It includes all facilities identified for elimination and it will be modified to include the additional facilities at ORNL and Y-12.

Appendix E contains enforceable milestones agreed to for the next three years. It lists the ongoing projects and the documents that need to be completed in preparation for specific remediation projects. "There have been two changes to Appendix E that

The revisions are the result of approval of the Integrated Facility Disposition Program and the resolution of disputed FFA milestones among DOE, EPA, and TDEC.

IN THIS ISSUE

K-25 Recommendation3

Reservation Update3

EM Funding for FY '094

Groundwater Monitoring..5

Oral History Update6

Profile: Lance Mezga.....7

The Advocate is a publication of the Oak Ridge Site Specific Advisory Board (ORSSAB)—an independent, nonpartisan, volunteer citizens panel providing recommendations and advice to DOE's Environmental Management Program

continued on page 2

FFA Modification

continued from page 1

reflect this integration of the new work into the FFA,” said Pat Halsey, DOE Oak Ridge Federal Coordinator for ORSSAB and the FFA coordinator. “Because the Alpha 5 Building at Y-12 is in such poor condition a milestone has been agreed to for a waste handling plan to implement the removal of the legacy waste materials from this building.” In turn, an Appendix E milestone for initiating the Alpha 4 activities was moved to Appendix J, which contains the out-year non-enforceable milestones.

“In addition,” she said, “the modification of the record of decision for Upper East Fork Poplar Creek has been added to the Appendix E to reflect that the contaminated soil around and under the Alpha and Beta Buildings at Y-12 within the area known as the West End Mercury Area will now be excavated rather than capped around the buildings and left in place.” Halsey said the agreed-to plan now reflects the removal of contaminated soil under the demolished buildings within two years of demolition completion.

Problems at ORNL include contaminated buildings, contaminated groundwater, and excess facilities that have radioactive inventories that require stabilization and disposition.

Appendix J contains the detailed documentation and work scheduled to be completed for two years beyond the three-year Appendix E period. Beyond these two years are the planning targets showing the high-level decision process that will carry the program to completion. Appendix J does not contain enforceable milestones as Appendix E does. Once approved, the new modi-

fication scope from integrating the IFDP into the FFA will show up as non-enforceable milestones and targets in Appendix J.

Adler discussed the major components of the additional work at the February public meeting. Problems at ORNL include contaminated buildings, contaminated groundwater that also affects surface water, and excess facilities that have radioactive inventories that require stabilization and disposition. “The first phase is to knock down some high-priority buildings, that should they fall down on their own could lead to potential releases,” he said.

The work at ORNL and Y-12 is to be done in phases with each phase lasting four to six years.

A big project at ORNL to be done in the first phase is the excavation of contaminated soil around Tank W-1A in the central campus. Another area is the northwest quadrant called the 2000 complex that has some contaminated buildings, but is also being eyed as an area for a privately developed science and technology park.

The northeast quadrant of the 3000 complex is an area that can be cleaned up quickly and used as a staging area for the contractors doing the work. It also has nearby access to a haul road to transport waste and debris to the waste disposal facility in Bear Creek Valley.

The first phase of work at ORNL will also include the demolition of the 3026 and 3038 Buildings. “3026 is a poster child for rundown buildings at the lab,”

said Adler. “It has holes in the roof; the fire suppression system is disabled; it has some severe structural problems.”

The second phase at ORNL is to clean out defueled reactors and demolish ancillary buildings as well as other contaminated buildings. The third

“The first priority at Y-12 is to determine the extent of mercury contamination in storm drains, clean them out, and refurbish them.”

phase will address the 3019 isotopes area, including the demolition of Building 3017. And the fourth phase would clean up the central gaseous waste treatment facility. “Then there would be a large scale soil cleanup activity which concludes with the cleanup of sediment in the creek that runs through the area,” said Adler. “That should take us to about 2020 and most of the work is done in the central campus area.

“Significant problems at Y-12,” said Adler, “include solvent plumes and mercury in storm drains, basements, soil, and ultimately East Fork Poplar Creek. While mercury releases in the creek are much less than they used to be, they still exceed contamination limits for drinking water.” He said the first priority at Y-12 is to determine the extent of mercury contamination in storm drains, clean them out, and refurbish them to prevent continued access to the creek. He said that would take about two years.

Another priority is to demolish Alpha 5. “It no longer serves a purpose and it contains a lot of contamination and structural issues that must be addressed soon,” said Adler.

continued on page 8

ORSSAB Recommends Unmanned Interpretive Center at K-25

ORSSAB weighed in on the K-25 building historic preservation debate recently by recommending that DOE build an unmanned interpretive center at the site. The board also recommended that Manhattan Project exhibits at the American Museum of Science and Energy be expanded with an interpretive center making use of existing staff, space, infrastructure, and artifacts to explain K-25's role more fully in the Manhattan Project and the Cold War.

The recommendations, passed at the board's February 11 meeting, were a follow-up to recommendations made last year when there was still hope of reclaiming part of the K-25 Building's entire North Tower. Although DOE has not made a formal announcement, the agency has made it clear that the tower may not be salvageable because of its deteriorated state and the cost and safety factors involved in converting it to some sort of interpretive center or museum.

Demolition of K-25 has already started at the end of one of the legs of the building. DOE must make a determination this spring if it will indeed demolish the North Tower and how it will commemorate the building's historic significance. Steve McCracken, DOE's Oak Ridge Assistant Manager for Environmental Management, has said that he doesn't want to demolish the North Tower until some acceptable plan is in place to properly memorialize the building.

In 2005 an agreement was reached among DOE, the Tennessee State Historic Preservation Office, the City of Oak Ridge, the Advisory Council on Historic Preservation, and the Oak Ridge Heritage and Preservation Association to preserve the North Tower, which connects the two long 'legs' of the U-shaped building, for historical purposes.

Since that agreement was reached there have been many ideas proposed

on how best to preserve the historical significance of the building using the North Tower as a museum or interpretive center. Since it's apparent the North Tower can't be saved, a recent idea proposed by the Partnership for K-25 Preservation is to build a staffed interpretive center near the south end of the building site.

ORSSAB agreed with the concept of an interpretive center but recommended an unmanned, self-guided facility that would contain displays, photographs, artifacts, and representations explaining the history of the Manhattan Project and the role K-25 played in the effort to build the first atomic weapons. A complementary exhibit at the American Museum of Science and Energy would provide synergy for the K-25 center and take advantage of existing museum amenities.

DOE expects to hold a series of meetings beginning in late March to come up with an acceptable path forward.

Reservation Update

Perma-Fix Cleared to Resume Waste Shipments

Restrictions on waste shipments from Perma-Fix's M&EC facility at East Tennessee Technology Park have been lifted. The company had been barred from sending low-level and mixed low-level waste to the Nevada Test Site because of external contamination issues involving shipments from Perma-Fix-owned facilities in Oak Ridge and Washington state.

Subsequent to the lifting of the ban the M&EC facility shipped a load of

radioactive waste to Nevada in early February.

First Shipment of RH TRU Leaves Oak Ridge

DOE Oak Ridge achieved a major milestone in its cleanup efforts when the first shipment of remote-handled transuranic waste (RH TRU) left the Oak Ridge Reservation bound for the Waste Isolation Pilot Plant (WIPP) in New Mexico.

A truck loaded with casks of RH TRU left the Transuranic Waste Processing

Center on the morning of February 26. The truck and its cargo arrived safely at its destination a little after noon the next day after traveling 1,300 miles.

"The start of RH shipments to WIPP honors our commitment to move this waste out of Oak Ridge and place it in a permanent repository," said Gerald Boyd, manager of the department's Oak Ridge Office.

Five months ago the first load of contact-handled TRU was shipped to New Mexico, achieving a previous regulatory milestone.

Stimulus Funding Shifts Environmental Management Program Into High Gear

Supplemental funding from the government's American Reinvestment and Recovery Act (ARRA) is set to provide a substantial stimulus to the Oak Ridge Environmental Management (EM) Program in FY 2009, according to Assistant Manager for EM Steve McCracken. ARRA is the official name for the economic stimulus package passed by Congress in early March.

Speaking at the March 11 ORSSAB meeting, McCracken said that ARRA funding will augment the base budget that EM will receive in FYs 2009, 2010, and 2011. "In fact," he said, "the work to be done with that money is defined to be projects that can be started and completed in that frame of time."

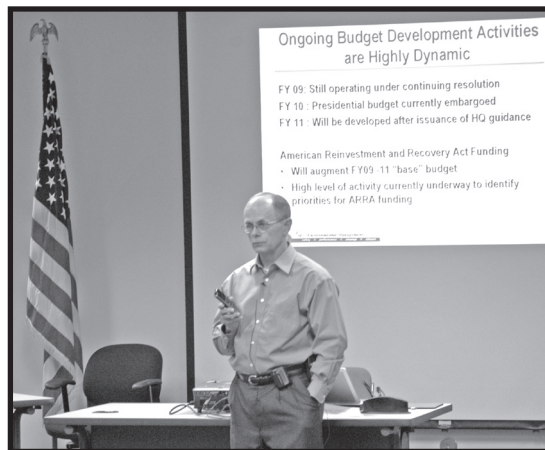
The statutory requirements, he added, are that ARRA funding be obligated toward projects by the end of FY 2010 and spent by the end of FY 2015. But DOE-Headquarters EM management is taking an even more aggressive approach by requiring that EM sites obligate funds by the end of FY 2009 and spend it by the end of FY 2011.

"One of our goals is to be an opportunity site so as to be able to demonstrate that we're a good site to spend stimulus dollars for the reason that they're being provided.

"We're going to plan to a budget that is above what I'm prepared to talk about this evening in the event that over the period of receiving stimulus funding there's an opportunity to do more," he said. DOE-Headquarters is reportedly holding back a percentage of the ARRA funding so it can then release it to sites that are making good on their promises to use the money effectively.

The general considerations for scheduling projects with ARRA funding, he said, are that projects be "shovel ready," so as to produce jobs quickly, and that they support existing Federal Facility Agreement milestones agreed to with the state and EPA. Many of these activities can be started right away upon receipt of the supplemental funding.

Another aspect of local EM planning is to facilitate turning at least part of the Oak Ridge National Laboratory central campus into an energy park



DOE Assistant Manager for EM Steve McCracken explains how the national economic stimulus package can benefit Oak Ridge Reservation cleanup.

per the government's Energy Parks Initiative, which is geared toward transitioning science to business. "This is a real opportunity for us to move science into industry," he said.

A variety of projects are being scheduled at all three of the main DOE sites in Oak Ridge: Oak Ridge National Laboratory, the Y-12 National Security Complex, and the East Tennessee Technology Park. The linchpin for disposing of all the wastes generated by these cleanup projects is, of course, the EM program's Waste Management

Facility near Y-12. "We're going to expand it to 1.7 million cubic yards as fast as we can go, which is consistent with the record of decision," McCracken said. "It would be ironic in my view if we let that become the reason we can't get this work done.

"This is going to be a very exciting time for us," McCracken said, "but it's also going to be very intimidating if we don't do it right. Every day we're being reminded that there aren't going to be fewer requirements for using this money, there are going to be more, to make sure that we're using this money correctly and that there's no waste, fraud, and abuse. We also have to certify that we have the systems in place to manage this money in the manner described."

During the meeting, McCracken was asked if historic preservation of the K-25 building was included in ARRA funding. He said that it was not specifically identified, but funding might be possible. He hesitated to say more, though, because he was starting to get himself "crosswise with the historical preservation group" because he's trying not to make decisions outside the group's decision-making process. The "group" refers to DOE, the Tennessee State Historic Preservation Office, the City of Oak Ridge, the Advisory Council on Historic Preservation, and the Oak Ridge Heritage and Preservation Association.

"What I'm going to do," he said, "is set up a series of meetings beginning at the end of March to address the issue of what it is we're going to do for historical interpretation of the East Tennessee Technology Park. I want to have those discussions then. And those will be public meetings, so everyone is welcome to come."

DOE to Expand Melton Valley Groundwater Monitoring System West of Clinch River

DOE is expanding its monitoring network in Melton Valley to include areas across the Clinch River from the Oak Ridge Reservation (ORR). The reason is to determine if there is any contamination moving off the reservation and under the river from the waste disposal areas in Melton Valley.

DOE already has a line of six monitoring wells on the east side of the Clinch between the river and the Melton Valley disposal grounds. Some of those wells have detected minute traces of strontium in levels well below what is considered harmful.

In order for the new monitoring network to produce valid results the department needs to minimize water withdrawal from private wells in the immediate area. Continued use of the private wells could invalidate results in the new monitoring network. To support that objective the department is going to provide free water to residents in that area.

Dave Adler, the DOE project manager for the Federal Facility Agreement for the ORR, informed the ORSSAB Environmental Management and Stewardship Committees about the plan at a combined committee meeting in February. Adler said he has talked with property owners on the west side of the Clinch along Jones Road about expanding DOE's monitoring system to sampling locations on that side of the river. Some of the monitoring wells will be near the river and others farther west at higher elevations.

The existing private wells will be capped and pumping systems turned off. "Continued use of the private wells could affect data gathering in the new wells," he said. "There may be some additional data gathered

sporadically from the private wells, but for the most part they will be secured."

In exchange for taking the wells out of service, DOE has offered to connect the property owners to a public water system, the Watts Bar Utility District. DOE will pay for the installation of the water main along Jones Road as well as the connecting lines to the residences. In addition, DOE will pay for the water bills of those residences for as long as water quality is monitored, at least five years.

"Work installing the water main will begin in late winter or early spring and should be finished in six months," said Adler. "In the meantime if any of the residents want bottled drinking water, we'll provide it."

Melton Valley wasn't the only groundwater issue discussed at the February committee meeting.

TDEC's Director of the DOE Oversight Division, John Owsley, said his division has been monitoring water quality on and off of the reservation since the early 1990s. During that time TDEC has been keeping an eye out for offsite contamination that could be a result of DOE activities. "We've taken measurements at a number of offsite locations including the University of Tennessee Arboretum, near East Tennessee Technology Park, Melton Valley, and along Jones Road," he said. "While there have been some elevated readings there have been no exceedences of maximum contaminant levels in drinking water wells."

Regarding the new line of monitoring wells in Melton Valley, it will be some time before any sampling results are available. Adler promised to keep the committees advised of the progress of the work and sampling results.



Stop by the ORSSAB Booth at Oak Ridge Earth Day

Saturday, April 25
11:00 a.m. – 6:00 p.m.
Oak Ridge Civic Center

"Planting the Seeds of Change"

Sponsored by the East Tennessee Earth Day Coalition

Center for Oak Ridge Oral History Set to Begin Recording New Interviews

The Center of Oak Ridge Oral History (COROH) is poised to begin a new round of interviews to add to the collection of existing oral histories.

COROH was established with the help of \$7,000 in startup money from ORSSAB. However, for the main job of gathering and managing new oral histories, COROH has been waiting on a grant from DOE-Oak Ridge.

That transfer of \$150,000 has been made and COROH will begin its work very soon. "We'll be instituting a program to continue the oral history process and get more people and their stories," said Kathy McNeilly, Director of the Oak Ridge Public Library, which is managing COROH. "A half-time employee will be hired to help with the program," she said.

Over the years about 300 oral histories have been recorded. The plan is to consolidate all of that material, or at least copies of it, in one location.

"We have about 25 people slated for additional interviews," said McNeilly. "We'll soon start capturing the histories of these people who are important to our city's history." Another couple of dozen people have contacted COROH saying they would like to be part of the process. McNeilly said interviews will likely be done in people's homes or at space in the New Hope Center near Y-12 National Security Complex. ORSSAB member Steve Stow and D. Ray Smith of Y-12 will do most of the interviews.

McNeilly said plans are to place the interviews on a web site and eventually on public access work

stations at the library. She said COROH is investigating other ways of disseminating the information.

An off-shoot of the program is the production of a film on the history of K-25. The film was suggested by DOE-Oak Ridge Assistant Manager for Environmental Management Steve McCracken, who is DOE's 'champion' for the Oak Ridge oral history project. It will use existing



"We're still in the planning stages and it hasn't yet been determined if it will focus on just the K-25 Building or the entire K-25 site," said Pat Halsey, DOE's ORSSAB Federal Coordinator and representative with COROH. "The hope is to have the film finished

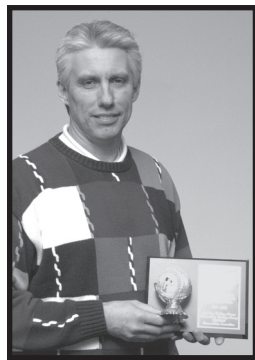
in the fall to commemorate the 60th anniversary of the opening of Oak Ridge to the public," she said.

COROH had its beginnings when Stow wrote a report that pointed out the lack of coordination of oral histories that have been done over the years as well as the absence of a plan to gather and consolidate additional and existing histories in one location. He asked ORSSAB to study the matter, which resulted in a workshop and establishment of an oral history steering committee to initiate a comprehensive program for Oak Ridge. Background information on the program can be found in previous Advocate issues (July 2007, October 2007, January 2008, April 2008, and July 2008) at www.oakridge.doe.gov/em/ssab/Publications/Advocate.htm.

For more information about COROH call the Oak Ridge Public Library at 425-3455.

Ralph Skinner Recognized for Work with Stewardship

Former DOE liaison to the ORSSAB Stewardship Committee Ralph Skinner was recognized by the committee



Ralph Skinner

at its January meeting for his long-time service to stewardship. Skinner worked with ORSSAB's stewardship activities beginning in 1996 as a member of

the End Use Working Group and the Stewardship Working Group. He continued as the Stewardship Committee liaison until 2008 when he was reassigned by DOE as the Federal Deputy Project Director for Y-12 Projects.

A big baseball fan, Skinner was presented a plaque with a glove holding a baseball and the inscription "Thanks for being team player for stewardship." A number of members of the End Use Working Group, Stewardship Working Group, and the current ORSSAB Stewardship Committee signed the baseball.

Lance Mezga Proved Himself a Leader Right from the Beginning

Board member Lance Mezga stepped into a leadership position within weeks of his appointment to ORSSAB when he was elected chair of the board's Environmental Management Committee following the 2005 annual planning retreat. After just one year he was elected chair of the board.

While it might appear unusual that a new member would be put in a leadership role right away, it was obvious to all the board members that Lance was perfectly suited for the tasks by virtue of his qualifications and experience.

A native of the Cleveland, Ohio area, Lance earned bachelor's and master's degrees in groundwater geology from Kent State University. Upon graduation he went to work for an engineering firm in western Pennsylvania that did environmental reclamation of strip mines and underground coal mines. He returned to the Cleveland area to work for an architectural engineering firm involved in the environmental field.

In 1979 he came to the Oak Ridge National Laboratory to head the Geothermal Biomass Energy Environmental Impact Assessment Program. He went on to head DOE's Low-Level Waste Technology Development Program and set up Martin Marietta's radiologic waste management organization to standardize procedures in Oak Ridge, Portsmouth, and Paducah.

In the late 1990s, he moved over to the K-25 site to run Lockheed Martin's central waste management organization and later the mixed- and low-level waste operations. He also worked to develop the first integrated burn plan

for the Toxic Substances Control Act Incinerator, coordinating shipments from other DOE sites.

When Bechtel Jacobs, Co., became DOE's prime contractor for environmental cleanup of the Oak Ridge Reservation, Lance returned to the lab to work with the Office of Science waste management program. Today he is responsible for the decontamination and decommissioning of Office of Science buildings, ensuring environmental integration across all construction projects.



ORSSAB member Lance Mezga in his office at Oak Ridge National Laboratory where he is responsible for the decontamination and decommissioning of Office of Science Buildings.

"When I left environmental management activities for the current position, I felt like I could provide a level of expertise to the SSAB in understanding the functions and workings of the construction and technical scope," he said. "It was an opportunity to provide something to the community which fit perfectly with my technical background.

"Since I've been on the board I think we've improved the technical knowledge of the members by instituting some training programs to get everyone on a common level of understanding. We've worked very hard to engage all of the members. Everyone needs to participate and everyone's opinion is important and valid.

"With the Integrated Facility Disposition Program and the economic stimulus package that's being implemented, the board will have an opportunity to provide comment and input to planning and how dollars will be used. The board needs to be prepared to step up and take advantage of that opportunity."

In addition to his work on the board Lance is also active as a member of the board of directors of the Waste Management Symposium. He's been a member of the symposium's Program Advisory Committee for 20 years and has been chair of the Low-Level/Mixed Low-Level Waste Treatment Committee for the last 10 years.

Lance also is secretary of the Decontamination and Decommissioning Working Group for the Energy Facility Contractors Operating Group, which is composed of all the contractors at DOE facilities.

He has served as a technical expert of the International Atomic Energy Agency, the Organization for Economic and Community Development, and the Nuclear Energy Agency on low-level waste issues.

Lance and wife Ernestine live in Knoxville and have two grown daughters, Leah and Sarah.

FFA Modification

continued from page 2

The second phase at Y-12 will address Alpha 4, Beta 4, and the Biological Sciences Complex. The third phase will tear down the balance of unneeded buildings at Y-12, and the last phase would be the clean up of the uranium processing facility. Soil cleanup at Y-12 is also a big part of the program, which Adler said will be done as large tracts of land become available as buildings are removed.

Adler said a decision still needs to be made about Bear Creek Burial Grounds, where about 45 million pounds of uranium are buried. He said a decision must be made about what to do with it and then a date for handling it must be set.

Another decision that must be made concerns an expansion of the waste disposal facility in Bear Creek Valley commonly known as the Environ-

mental Management Waste Management Facility. The facility is currently approved to accept up to 1.7 million cubic yards of material. But the additional demolition rubble and soil excavation from IFDP work will be more than the facility can hold.

There is room at the current site to expand to 2.2 or 2.3 million cubic yards. But that has to be approved by TDEC and EPA. An additional site may also need to be found to construct another waste facility to handle the planned scope of work.

One question that was asked at the public meeting was if money from the president's economic stimulus package would be used for the IFDP work. "This schedule is based on the current funding authorization independent of potential stimulus dollars," said Adler. "If the package contains money for

Oak Ridge we would have more money to work with and we could get the work done more quickly."

Initially the public had until February 27 to provide comment on the proposed modification to the FFA, but an additional 30 days was added to the comment period, extending the deadline to March 27.

Once the FFA parties have dealt with the public comments, they will make any adjustment necessary to the scope additions to the Appendix C and the non-enforceable Appendix J planning milestones and targets. At that time the parties will approve the major modification and the public will be notified of the modification to the FFA. The Oak Ridge FFA and its appendices can be accessed at: www.bechteljacobs.com/ettp_ffa.html.

**Oak Ridge Site Specific Advisory Board
P.O. Box 2001, MS-7604
Oak Ridge, Tennessee 37831**

JOIN US FOR OUR PUBLIC MEETINGS

Board Meetings

- April 8, 6:00 pm – Transuranic Waste Program
- May 13, 6:00 pm – To be determined

Committee Meetings

- April 15, 5:30 pm – Environmental Mgmt.
- April 21, 5:30 pm – Stewardship
- May 19, 5:30 pm – Stewardship
- May 20, 5:30 pm – Environmental Mgmt.

The Advocate is a publication of the Oak Ridge Site Specific Advisory Board. To add your name to or remove it from our mailing list, to advise us of a change in address, or for additional copies of the Advocate, write us at the above address, or call the SSAB Support Office at (865) 241-4583 or 241-4584. **Web address: www.oakridge.doe.gov/em/ssab**